CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	UNAVCO, Inc. PBO GPS Station
Proposed Implementation Date:	June 2007
Proponent:	UNAVCO, Inc. 6350 Nautilus Drive, Boulder, CO 80301 Ph: 303-381-7559
Location:	Sections 10 and 11, Township 13 South, Range 2 West
County:	Beaverhead

I. TYPE AND PURPOSE OF ACTION

The Proponent has applied to the DNRC for a Land Use License for the purpose of installing, operating, and maintaining a Plate Boundary Observatory (PBO) GPS Station on Common School Trust State land in Section 10-T13S-R2W. The Station site would consist of one 5-foot tall antenna and an associated solar panel, all situated within a 30' x 30' (.02 acres) fenced area. The entire system would require three days to install and would remain in place until 2017. The Proponent would need to use an existing non-motorized two-track road in Section 11-T13S-R2W to access the proposed station site.

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

Provide a brief chronology of the scoping and ongoing involvement for this project.

Dillon Unit Manager Richard Moore conducted a field review in September 2006. Scoping notices were sent to the Montana FWP (Pat Flowers, Bob Brannon, Richard Oswald), Red Rock Lakes National Wildlife Refuge, Volker Saier (Lessee), DNRC Archaeologist (Patrick Rennie), the Montana Natural Heritage Program, and adjacent landowners: The Nature Conservancy and Lee Martinell Co.

2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

The Beaverhead County Weed Board administers the State weed laws in Beaverhead County.

3. ALTERNATIVES CONSIDERED:

Alternative A: A Land Use License would be granted for the purpose of installing, operating, and maintaining a Plate Boundary Observatory (PBO) GPS Station on State land in Section 10-T13S-R2W.

Alternative B: No Action - No Land Use License would be granted. Current non-motorized recreational use, grazing leasing, and wildland fire suppression activities would continue.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:
Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.

The station site would be located atop a small ridge on rolling terrain. The site would be located approximately 325' off of an existing non-motorized two-track road. The slope of the terrain between the existing road and the proposed station site is 12% - 15%. The hillside is covered with native grasses and sagebrush and is currently grazed with no sign of erosion. Installation activities would occur during dry soil conditions after June 15th. Should any sign of erosion occur as a result of installing the PBO GPS station, UNAVCO, Inc. would implement erosion control measures to stabilize the site and seed the affected area with native grasses. Minimal impacts are anticipated.

5. WATER QUALITY, QUANTITY AND DISTRIBUTION:
Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.

There are no rivers, streams, creeks, or wetlands within or near the proposed project area. No significant impacts are expected.

6. AIR QUALITY:
What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.

None.

7. VEGETATION COVER, QUANTITY AND QUALITY:
What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.

Some vegetative disturbance during installation is expected. The site would be located approximately 325' off of an existing non-motorized two-track road. The slope of the terrain between the existing road and the proposed station site is 12% - 15%. The hillside is covered with native grasses and sagebrush and is currently grazed with no sign of erosion. Installation activities would occur during dry soil conditions after June 15th. Disturbed areas caused by installation activities would be seeded with native grasses by UNAVCO, Inc. Should any noxious weeds occur in the proposed project area, UNAVCO, Inc. would spray for weeds. Minimal impacts are anticipated.

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:
Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.

A variety of big game, small mammals, raptors, and songbirds use this area. The proposed project's three-day installation activities could disrupt wildlife movement and patterns. Due to the short

duration of the proposed installation activities, installation activities occurring after June 15th, minimal area of impact, and no new road construction, most nesting and calving activities should be completed or minimally impacted.

9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:
Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.

The Montana Natural Heritage Program identified three vertebrate animal species of concern near the proposed project area: pygmy rabbit, grasshopper sparrow, and greater sage grouse. One vascular plant species of concern was also identified: painted milk vetch.

Pygmy rabbits are known to exist approximately one mile to the southeast of the proposed project area and probably inhabit the proposed project area. Due to the short duration of the proposed project activities, minimal area of impact, and no road construction, no significant impacts are anticipated.

Grasshopper sparrows are found one and one-half miles to the southeast of the proposed project area and probably inhabit the proposed project area. Due to the proposed project installation activities after June 15th, which is mid-nesting season of mid-May through mid-July, and the minimal area impacted by the proposed project, minimal impacts are anticipated.

Greater sage grouse occupy the proposed project area. There are no leks identified near the proposed project area and, with the proposed project installation activities occurring after June 15th (after the breeding and nesting season), and a minimal area of impact, no significant impacts are anticipated.

Painted milk vetch is found one and one-half miles to the southeast of the proposed project area. Due to the minimal area impacted by the proposed project, no new road construction, and the Proponent responsible for the spraying of noxious weeds, no significant impacts are anticipated.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:
Identify and determine effects to historical, archaeological or paleontological resources.

There were no archaeological sites observed during the snow-free field review in September 2006. No cultural resources concerns for this project. No archaeological investigative work is recommended. No significant impacts are anticipated.

11. AESTHETICS:
Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.

Due to the distance from the proposed project area to the nearest residences in a remote and sparsely populated area, low proposed project features - a 5-foot antenna and a solar panel - within a 30’ x 30’ (.02 acres) fenced area, no significant impacts are anticipated.

12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:
Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.

None.

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:
List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.

The Dillon Unit conducted a DNRC range evaluation on Sections 10 and 11-T13S-R2W in 2005. An Environmental Assessment was completed in 2004 for the Patchtop Timber Sale.

IV. IMPACTS ON THE HUMAN POPULATION

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

14. HUMAN HEALTH AND SAFETY:
Identify any health and safety risks posed by the project.

The proposed project would be self contained and occupy a 30' x 30' fenced area in a non-motorized access area of State Trust land. No impacts are anticipated.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:
Identify how the project would add to or alter these activities.

The proposed project would occupy a 30' x 30' (.02 acres) fenced area. Grazing activities would be able to co-exist with the proposed project and with the small area of impact, AUMs would not be affected. No significant impacts are expected.

16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:
Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.

None.

17. LOCAL AND STATE TAX BASE AND TAX REVENUES:
Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.

None.

18. DEMAND FOR GOVERNMENT SERVICES:
Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services.

None.

19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:
List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.

The DNRC Administrative Rules for State Land Leasing ARM 36.25.101 through 36.25.141.

20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:
Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.

The proposed project area is currently closed to all forms of motorized recreation. The proposed project would allow the Proponent motorized access for 1.5 miles on the current non-motorized road to access the proposed project area for proposed license activities. No impacts are anticipated.

21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:
Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing.

None.

22. SOCIAL STRUCTURES AND MORES:
Identify potential disruption of native or traditional lifestyles or communities.

None.

23. CULTURAL UNIQUENESS AND DIVERSITY:
How would the action affect any unique quality of the area?

None.

24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:
Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.

The proposed action has provided $25 via a Land Use License application fee and would provide a $250 annual rental fee during the 10-year Land Use License period. The existing grazing lease in Sections 10 and 11 would continue to provide $1467.15 annual revenue to the Trust (2007 rates).

EA Checklist Prepared By:	**Name:**	Richard A. Moore	**Date:**	February 7, 2007
	Title:	Dillon Unit Manager		

V. FINDING

25. ALTERNATIVE SELECTED:

Issue Land Use License to allow construction of the GPS station

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

Significant impacts are not anticipated as a result of the proposed activity. The project will create very minor disturbance and will not affect any limited resources at all.

Mitigation measures:

1. PBO GPS Station site installation activities will occur during dry soil conditions after June 15th.
2. Should any sign of erosion occur as a result of installing the PBO GPS station, UNAVCO, Inc. will implement erosion control measures as designated by the DNRC and seed the affected area with native grasses. All disturbed areas caused by installation or removal activities will be seeded with native grasses by UNAVCO, Inc.
3. Should any noxious weeds occur in the proposed project area, UNAVCO, Inc. will spray for weeds during the period of the Land Use License and for two years after termination of the License.
4. Licensee must carry general liability insurance for all its activities upon the tract that lists the Licensee and the State as co-insured. The minimum coverage shall be in the amount of $1,000,000 combined single limit per occurrence. The Licensee must provide the Licensor with proof of said insurance coverage upon execution of this agreement and by March 1st annually for subsequent years.
5. UNAVCO, Inc. must remove the entire station site upon termination of the License in 2017 unless a subsequent License is applied for at that time. All disturbed areas will be seeded with a native grass species.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

	EIS		More Detailed EA	X	No Further Analysis

EA Checklist Approved By:	**Name:**	Garry Williams
	Title:	CLO Area Manager
Signature: Garry Williams		**Date**: 2/7/07